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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,920	08/16/2000	Kiyohiko Yamazaki	OKI 259	3135
23995	7590	09/23/2004	EXAMINER KUMAR, PANKAJ	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			ART UNIT 2631	PAPER NUMBER

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/638,920

Applicant(s)

YAMAZAKI, KIYOHICO

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6-9 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.
2. In response to applicant's statement that he has incorporated by reference his arguments made in the request for reconsideration, the office incorporates by reference the response to arguments made in the advisory action.

Response to Amendment

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6, 9, 11, 12-14, 17-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Minami 5402446 in view of Kim 5,854,876.
5. As per claim 1, Minami teaches a receiving circuit comprising: a demodulator circuit demodulating a radio signal in a digital communication system (Minami abstract: "Connected to the demodulating section, a synchronizing circuit (16) establishes bit and frame synchronization on the basis of a binary digital signal obtained by deciding the demodulated signal to produce a synchronization detection signal when the bit and frame synchronization is established.") that includes a burst signal (Minami fig. 1: 18 intermittent driving circuit exists and it operates to take into account a bursty or

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intermittent input signal) and outputting the demodulated data therefrom (Minami fig. 1: output of 48); a detector which detects a synchronizing pattern included in the demodulated data and outputs an instruction signal for providing instructions for a result of the detection (Minami does not teach this but it would be obvious as explained below.); a pulse generator capable of receiving the instruction signal (Minami fig. 1: 18 receives output of 16) and outputting a pulse signal each time a predetermined time elapses since the reception of the instruction signal (Minami fig. 1: 18 outputs off signal to PLL if synchronization signal is not received in a predetermined time; col. 5 paragraph 1; col. 6 1st full paragraph: 18 produces off signal at the third time slot); a control circuit which outputs control signals corresponding to at least either one of the instruction signal and the pulse signal (Minami fig. 1: output of 22 is based on 18); and a clock generator (Minami fig. 1: 20) which generates a clock signal (Minami fig. 1: output of 20) for storing and outputting desired data included in the demodulated data (Minami fig. 1: multiple elements in fig. 1 store and output as claimed such as sample and hold circuit 52) in response to the control signal (Minami fig. 1: the outputs of elements in fig. 1 are in response to the control signal output from 22).

6. Minami does not teach a detector which detects a synchronizing pattern included in the demodulated data and outputs an instruction signal for providing instructions for a result of the detection. Minami does teach a synchronization circuit in fig. 1: 16. Kim teaches a detector (Kim col. 5 lines 12-18: "Sync pattern detector") which detects a synchronizing pattern included in the demodulated data (Kim col. 5 lines 12-18: "compares a predetermined sync pattern with the sync pattern of the demodulated data 1 received from the demodulator") and outputs an instruction signal for providing

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instructions for a result of the detection (Kim col. 5 lines 12-18: “outputs the sync detection signal” which are used later by subsequent elements as instructions from a result of the detection). It would have been obvious to one skilled in the art at the time of the invention to modify Minami sync area with the teachings of Kim sync system. One would be motivated to do so if one wanted to accurately detect data at a predetermined position in a digital VCR as taught in Kim col. 1 1st paragraph.

7. As per claim 6, Minami in view of Kim teaches a radio signal receiving circuit comprising: a demodulator circuit demodulating a burst signal in a digital communication system that is included in a radio signal received by the demodulator circuit, the demodulator circuit outputting demodulated data; a detector detecting a synchronizing pattern signal from the demodulated data received thereto; a pulse generator generating a pulse signal in response to the synchronizing pattern signal (Minami fig. 1: on/off signals from 18 are in response to sync signal from 16); a control circuit generating a control signal in response to the synchronizing pattern signal and the pulse signal (Minami fig. 1:22 generates signal in response to 18 which means it also generates in response to 16 since 16 and 18 are in series); a clock generator outputting a clock signal in response to the control signal; and a storing circuit storing and outputting the demodulated data in response to the clock signal (remainder discussed above in Minami in view of Kim).

8. As per claim 9, Minami in view of Kim teaches a radio signal receiving circuit according to claim 6, wherein the pulse generator (Minami fig. 1: 18) includes a counter (Minami col. 6 1st full paragraph: 18's output is based on the time slot number).

9. As per claim 11, Minami in view of Kim teaches a radio signal receiving circuit according to claim 6, wherein the clock signal includes a first clock signal and a second

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clock signal (Minami fig. 1: 20 will inherently operate to send out multiple signals at multiple times – a signal at time 1, a signal at time 2, etc.).

10. As per claim 12, Minami in view of Kim teaches a radio signal receiving circuit according to claim 6, wherein the pulse generator outputs the pulse signal at a timing after a predetermined time has passed from receiving the synchronizing pattern signal (Minami fig. 1: 18 outputs off signal to PLL is synchronization signal not received in a predetermined time; col. 5 paragraph 1; col. 6 1st full paragraph: 18 produces off signal at third time slot).

11. As per claim 13, Minami in view of Kim teaches a radio signal receiving circuit according to claim 12. What Minami does not teach is wherein the predetermined time is about 5 microseconds. It would have been obvious to one skilled in the art at the time of the invention to modify Barany to teach the predetermined time is about 5 microseconds since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

12. As per claim 14, Minami in view of Kim teaches a radio signal receiving circuit comprising: a demodulator circuit receiving a radio signal that includes a burst signal, the demodulator circuit generating demodulated data by demodulating the burst signal; a detector connected to the demodulator circuit, the detector outputting a synchronizing pattern signal detected from the demodulated data; a pulse generator connected to the detector, the pulse generator generating a pulse signal in response to the synchronizing pattern signal; a control circuit connected to the detector and the pulse generator, the control circuit outputting a control signal in response to the synchronizing pattern signal

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and the pulse signal; a clock generator connected to the control circuit, the clock generator generating a clock signal in response to the control signal (up to here discussed above with respect to other claims with Minami in view of Kim); and a storing circuit connected to the demodulator and the clock generator (Minami fig. 1: 52 is connected to 12 and 20 via other components), the storing circuit storing and outputting the demodulated data in response to the clock signal (Minami fig. 1: output of 52 is in response to the output of 20).

13. As per claim 17, Minami in view of Kim teaches a radio signal receiving circuit according to claim 14, wherein the pulse generator includes a counter (discussed above with Minami in view of Kim).

14. As per claim 18, Minami in view of Kim teaches a radio signal receiving circuit according to claim 14, wherein the pulse generator generates the pulse signal when either one of the synchronizing pattern signal or the pulse signal is activated (discussed above with Minami in view of Kim).

15. As per claim 19, Minami in view of Kim teaches a radio signal receiving circuit according to claim 14, wherein the pulse generator outputting the pulse signal at a timing after a predetermined time has passed from receiving the synchronizing pattern signal (discussed above with Minami in view of Kim).

16. As per claim 20, Minami in view of Kim teaches a radio signal receiving circuit according to claim 19, wherein the predetermined time is about 5 microseconds (discussed above with Minami in view of Kim).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 7, 8, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami in view of Kim and further in view of Suzuki 6522665.

19. As per claim 7, Minami in view of Kim teaches a radio signal receiving circuit according to claim 6. What Minami does not teach is wherein the burst signal includes a preamble, a unique word, an error detection bit and data. What Suzuki teaches is wherein the burst signal includes a preamble, a unique word, an error detection bit and data (Suzuki fig. 5: frame length, unique word, CRC, information data). It would have been obvious to one skilled in the art at the time of the invention to modify Minami so that data can be in frames as Suzuki teaches. One would be motivated to do so if one wanted to record data as taught in Suzuki.

20. As per claim 8, Minami in view of Kim and further in view of Suzuki teaches a radio signal receiving circuit according to claim 7. Suzuki also teaches wherein the unique word corresponds to the synchronizing pattern signal (Suzuki: synchronization throughout starting from col. 1).

21. As per claim 15, Minami in view of Kim and further in view of Suzuki teaches a radio signal receiving circuit according to claim 14, wherein the burst signal includes a preamble, a unique word, an error detection bit and data (discussed above).

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22. As per claim 16, Minami in view of Kim and further in view of Suzuki teaches a radio signal receiving circuit according to claim 15, wherein the unique word corresponds to the synchronizing pattern signal (discussed above).

Allowable Subject Matter

23. Claims 2-5, 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (703) 305-0194. The examiner can normally be reached on Mon, Tues, Wed and Thurs after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PK


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER